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(56) Documents Cited

GB 2274349 A WO 95/21428 A1

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**UK CL (Edition O) G4T TBA TBX
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ONLINE:WPI**

(54) Store checkout system and method

(57) A store checkout system has a plurality of terminals (10) at customer checkout locations, identification means (e.g. magnetic card swipe (18)) for identifying a customer, discrimination means for awarding credits to the card holder on the basis of purchases, storage means (22) for storing a number of predetermined credit redemption offers, each corresponding to a predetermined number of customer credits, input means (12) for selecting one or more credit redemption offers, means (22) for checking whether the credit redemption selected by the card holder is permitted, a printer (20) for printing a record of any credits awarded and details of the or each executed credit redemption offer and means for updating the customer credit balance on the balance of credits awarded and credits redeemed. Some of the credit redemption offers may comprise vouchers printed by the printer (20).

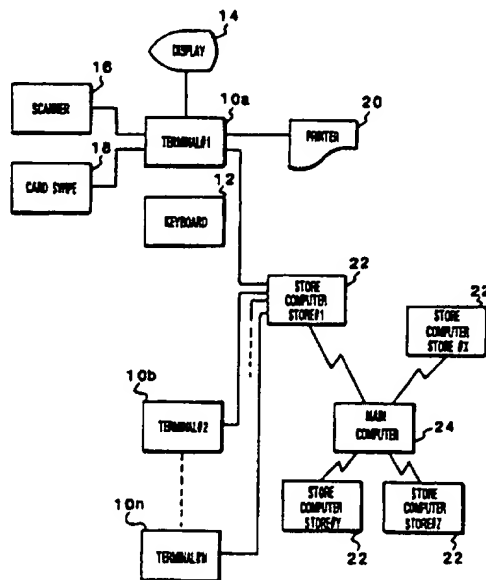


FIG. 1

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995

GB 2 306 740 A

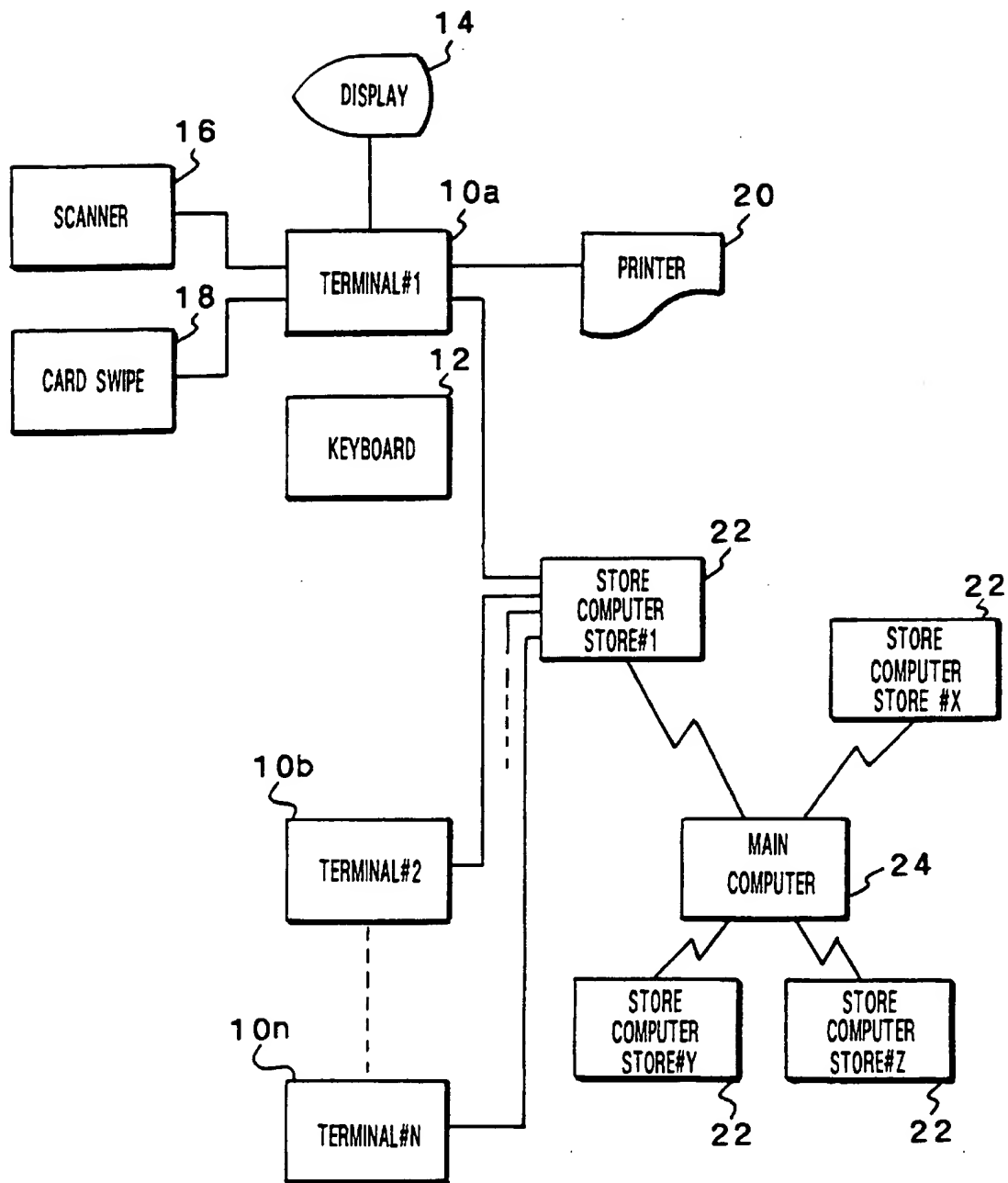


FIG. 1

SAFEMAT
lightening the load

01932 220263
THIS STORE WILL BE OPEN ON SUNDAY

Store manager - Barry Moles

Your checkout operator today was
SIMON

S GLEN MINERAL WTR	1.45
S GLEN MINERAL WTR	1.45
S GLEN MINERAL WTR	1.45
S GLEN MINERAL WTR	1.45
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
D/M BREAKFAST JC	0.85
S/W S/SHEER TIGHTS	2.49
DUNI NAPKINS	
REDUCED PRICE	0.82
DUNI NAPKINS	
REDUCED PRICE	0.89
DUNI NAPKINS	
REDUCED PRICE	0.82
DUNI NAPKINS	
REDUCED PRICE	0.59
FINISH DET/TABLETS	2.59
DOWN QUALITY ST	0.89
S CREME BATH	1.59
KLUX CLUB W/CHIEFS	1.25
TW CANDILE T/BAGS	0.85
S/W S/SHEER TIGHTS	2.49
D/M BREAKFAST JC	0.85
S COCONUT TREAT	0.75
ABC 200 REWARD BUAL ST	-2.89
ABC 100 REWARD CREM BATH	-2.78
EPS NO.	7075
SWITCH	
6759 404784 40242055	
EXPIRY DATE 11/97	
****	TOT 29.18
EPS	29.18
CHANGE	0.00

ABC NUMBER 6JJ125001018709405

PREVIOUS POINTS TOTAL 3336

POINTS EARNED THIS VISIT 29

POINTS REDEEMED THIS VISIT 300

YOUR NEW POINTS TOTAL 3065

5/10/95 09:57 7422 11 0007 168
Walton On Thames, KT12 2BS
Telephone : 01932 220263

FIG. 2

Your checkout operator today was
SIMON

S LA GERMAN LAGX4	1.59
TANGO LEMON DIETX6	1.79
DIET TANGO-ORANGE	1.79
S GLEN MINERAL WTR	1.45
S GLEN MINERAL WTR	1.45
FLASH SPRAY+BLEACH	1.59
FLASH SPRAY+BLEACH	1.59
FLASH B/ROOM SPRAY	1.59
4 MULTISAVE 4	-1.59
DOWN QUALITY STRT	14.15
HZ TOMATO KETCHUP	0.52
S JAFFA BARS XS	0.62
S GINGER ROYALETS	0.49
M/S PROT/BLADESK10	5.95
S HAND COOKED CHIP	1.17
K/CH NY CHD CRISPS	1.29
S DISH WASH SALT	1.59
NUTRALIA HAND WASH	1.49
S HAND COOKED CHIP	1.17
PERSIL W/UP LDD PC	0.72
CONFORT C/GARDENS	1.15
S BRAN FLAKES	0.89
S DISH WASH RINS	1.99
S ROUGH OATCAKES	0.56
S TOMATO PUREE	0.48
BR/B PG T/BAGSXB0	1.45
S GOURMET GRAINS	1.12
ABC 1500 REWARD B WESTERN	38.05
ABC 500 REWARD MONEY OFF	-5.00
****	TOT 33.05
EPS NO.	9077
MASTERCARD	
5435 5600 0493 J847	
EXPIRY DATE 03/97	
****	TOT 33.05
EPS	33.05
CHANGE	0.00

SAFEMAT ABC REWARD COUPON

ONE ADULT FREE WITH ONE PAYING

ADULT WHEN YOU BOOK BED AND

BREAKFAST AT ONE OF THE HOTELS

LISTED IN THE ABC BROCHURE. NOT TO

BE USED WITH ANY OTHER VOUCHER

(SEE BROCHURE FOR FULL DETAILS)

VALID UNTIL 31ST DECEMBER 1996

ABC REWARD CODE. 921

ABC NO. 6JJ125001018709405

ABC NUMBER 6JJ125001018709405

PREVIOUS POINTS TOTAL 2475

POINTS EARNED THIS VISIT 38

POINTS REDEEMED THIS VISIT 2000

YOUR NEW POINTS TOTAL 513

5/10/95 10:05 7422 11 0009 168
Walton On Thames, KT12 2BS

FIG. 3

3/4

01932 220263
 THIS STORE WILL BE OPEN ON SUNDAY
 Store manager - Barry Hales
 Your checkout operator today was
 SIMON

MY VICTORIA BISCUITS	5.89
JOB CREAM CRACKERS	0.45
B/EG M/EST FILTER	4.29
S ITALIAN DRESSING	0.85
S/M STELLETTE	0.37
BERT X/V OLIVE OIL	5.29
EAR T/WTR BISC	0.73
GRAN SUGAR	0.71
J/V TUNA CHUNKS	0.63
J/V TUNA CHUNKS	0.63
S SAVERS REF/SACKS	1.63
S P/B LINER+TIECKZS	1.39
J/V TUNA CHUNKS	0.63
J/V TUNA CHUNKS	0.63
ARIEL AUTO PWDR	1.95
S GLEN MINERAL WTR	1.45
JD S GLEN MINERAL WTR	-1.45
	TOT 26.07

EPS NO. 9074
 MASTERCARD
 5435 5605 5327 8380
 EXPIRY DATE 09/96
 **** TOT 20.18
 EPS 20.18
 CHANGE 0.00

ABC NUMBER 633125001018709405

POINTS EARNED THIS VISIT 20

5/10/95 09:52 7422 11 0006 168
 Walton On Thames, KT12 2RS
 Telephone : 01932 220263

52

54

FIG. 4

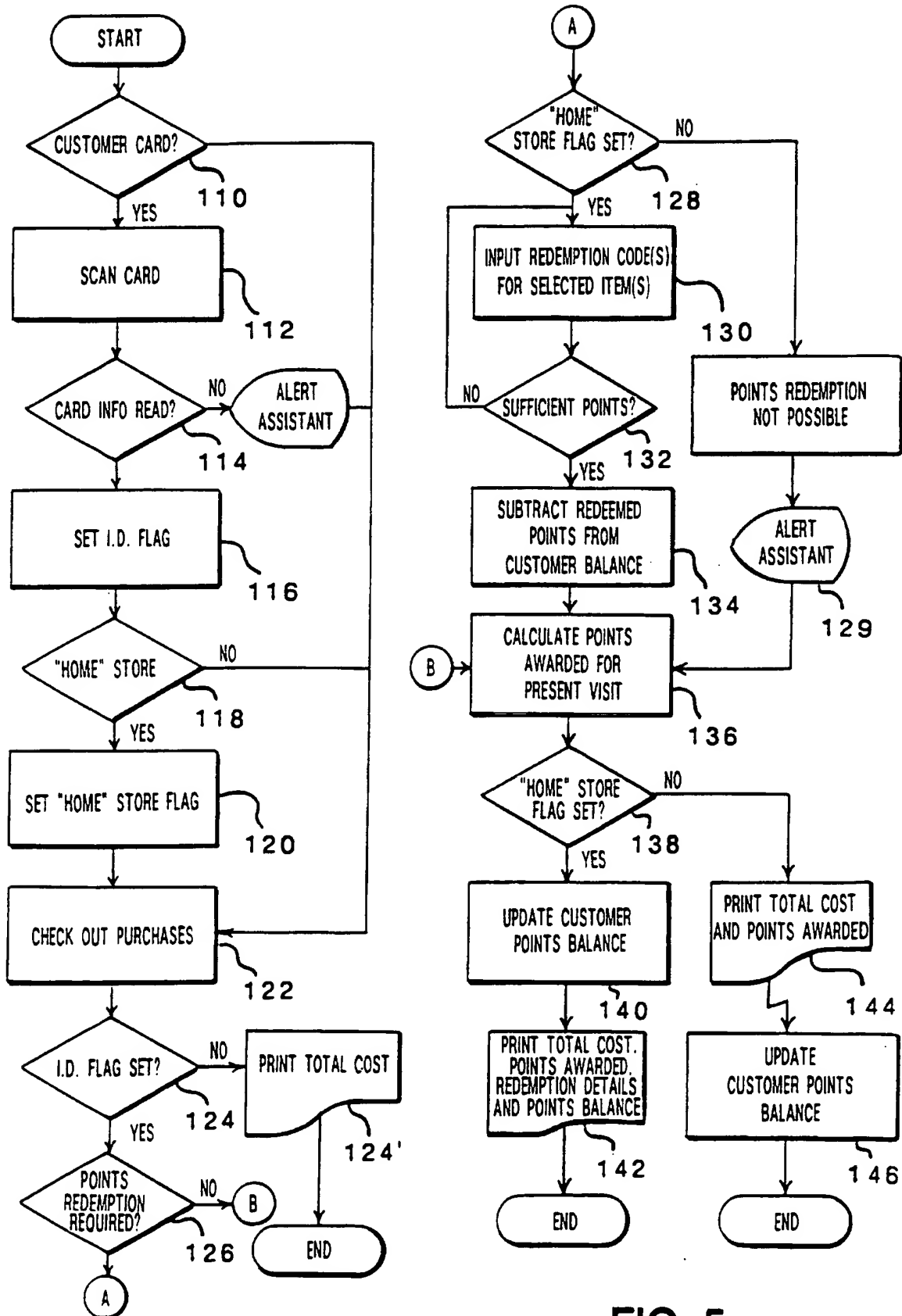


FIG. 5

-1-
DESCRIPTION

STORE CHECKOUT SYSTEM AND METHOD

The present invention relates to store checkout systems and methods and in particular to such systems and methods which are used in connection customer loyalty schemes.

Many retail stores, especially supermarkets, have introduced customer loyalty schemes, whereby customers are awarded credits or points on the purchase of goods or services, the credits or points being redeemable at a later date.

Thus, existing customer loyalty schemes are rather inflexible since in the known schemes redemption of credits or points can only take place in one way, for example by allowing discount on a purchase when a predetermined number of credits or points have been awarded or by allowing the customer to receive cash once a predetermined number of points have been gained.

Such loyalty schemes are inflexible not only from the customer's point of view but also from the retailer's point of view. In the latter respect redemption of credits or points in known loyalty scheme can effectively be used to purchase any product in the store.

It is an object of the present invention to

provide a store checkout system and method which can be used to implement a customer loyalty scheme which provides a much greater flexibility for redemption of credits or points awarded.

In accordance with a first aspect of the present invention, a store checkout system comprises:

a plurality of terminals at customer checkout locations, for checking out products selected by a customer;

identification means for reading stored information from an identification token presented by a customer;

means for verifying the validity of the token and for establishing the identity of the card holder;

discrimination means for awarding credits to the card holder of a validated token on the basis of the purpose;

storage means for defining a plurality of predetermined credit redemption offers, each credit redemption offer corresponding to a predetermined number of customer credits;

input means for selecting one or more credit redemption offers chosen by the validated card holder;

means for checking whether the credit redemption selected by the card holder from the plurality of predefined credit redemption offers is permitted;

printing means for printing a record of any credits awarded and details of the or each executed credit redemption offer chosen by the validated card holder; and

means for updating the balance of credits held by the validated card holder on the basis of credits awarded and credits redeemed.

By predefining a plurality of credit redemption offers which may be chosen by a customer in exchange for credits already awarded, the customer is permitted a much greater flexibility in using the credits which have already been gained. Typically, the credit redemption offers might include, but are not limited to:

a predetermined discount on the total bill in exchange for a specified number of credits;

refund of the price of one of a plurality of predefined products purchased by the customer in exchange for a predetermined number of credits;

vouchers for in-store goods or services or for goods and services offered by an external supplier; and

discount coupons for future use in the store or for goods or services offered by an external supplier.

The customer with an appropriate amount of credits may thus select the redemption offer which he

or she deems to be most preferable in the circumstances. The system also enables the store to promote certain products by, for example, offering a refund of the purchase price of a particular product in exchange for a predetermined number of credits, the purchase price being greater than the total bill discount available in exchange for the same number of credits. In this way, customers may be encouraged to purchase the product being promoted rather than to receive a reduction in the cost of the overall bill, which is effectively spread over all the products purchased.

The system also allows the credit redemption offers to be varied by the store from time to time, which helps to retain the customers' interest in the scheme. It also allows new products to be promoted using the system, whilst still allowing the traditional refunds offered by existing schemes.

Preferably, the identification token is in the form of a machine-readable card, each terminal being provided with a card reader. Preferably, each terminal is also provided with a bar code scanner for checking out purchases in the conventional manner.

It is preferred that credit redemption for each customer should only take place at a specified store, known as the customer's "home" store, where details

of the customer's credit balance are stored. This removes the possibility of a refund of more credits than are actually held in the customer's credit balance.

Preferably, credits can be awarded at any store location. If the store is the "home" store then the customer's credit balance is updated immediately. If credits are awarded at a different store, then the customer's credit balance, held at the "home" store, can be updated subsequently. In each case, the printing means will confirm the number of points awarded to the customer on that particular occasion. However, details of the customer's credit balance would only be printed if the purchase occurred at the "home" store.

If the customer's credits are to be redeemed in the form of vouchers, either for future use in-store or for goods or services offered by a third party, then the printing means can conveniently print a suitable voucher for such future use.

In accordance with a second aspect of the present invention, a store checkout method comprises:

verifying a customer as a valid participant in a reward scheme;

awarding credits to the customer on the basis of a purchase made by the customer;

storing a plurality of predefined credit redemption offers, each credit redemption offer corresponding to a predetermined number of customer credits;

selection by the customer of one or more credit redemption offers;

checking whether the credit redemption offer selected from the plurality of credit redemption offers is permitted;

printing a record of any credits awarded and the details of the or each executed credit redemption offer chosen by the valid customer;and

updating the balance of credits held by the validated customer on the basis of credits awarded and the or each credit redemption offer executed.

By way of example only, a specific embodiment of the present invention will now be described, with reference to the accompanying drawings, in which:-

Fig. 1 is a schematic illustration of a superstore checkout system in accordance with the present invention;

Figs. 2 to 4 are samples of customer receipts produced in accordance with the present invention; and

Fig. 5 is a flow chart showing the operation of the method of the present invention.

Referring firstly to Fig. 1, a plurality of

terminals 10a, 10b,... 10n are provided in a customer store. Each terminal 10 is provided with a keyboard 12, a visual display 14, a bar code scanner 16, an identification card reader 18 and a printer 20. Other conventional accessories, such as a credit card reader, electronic scales and the like may be provided but have been omitted for present purposes. Each terminal is connected to a store computer 22. The store computer in turn is connected to a remotely located main computer 24 which is in turn connected with other store computers 22, each computer being connected in turn to its own terminals (not illustrated) substantially identical to terminal 10a.

In use, a customer approaches a checkout with his/her purchases and if the customer is a participant in the loyalty scheme, presents his or her identification card. The card is swiped through the card swipe 18. If the card is read successfully then the customer's loyalty scheme details are memorized by the terminal.

The products are then checked out in the normal way, by reading the bar codes applied to the products and/or by means of the keyboard 12. The printer 20 prints the identity and value of the products, in the conventional manner.

The customer is credited with points depending

upon the total amount spent during the transaction. For example, one point may be awarded for every full £1 spent. Alternatively, or in addition, one or more points may be awarded for purchasing a predetermined product which is being promoted or by purchasing a predetermined number of the same product.

If the customer wishes to redeem previously awarded points during the present transaction, he or she notifies the checkout assistant and advises the assistant which redemption offer or offers is/are selected. The offers available will normally have been widely publicised beforehand and each offer will be associated with a predetermined number of credits. This information is held in each store computer 22 and may be updated from time to time by the main computer 24.

It would be usual for redemption to be permitted only in a predetermined store, where the balance of the customer's points are held in the store computer 22. Information concerning the so-called "home" store is held on the card and thus this information is given to the terminal 10 when the card is swiped. If the customer is not at his or her "home" store, then the system will not permit redemption of points. Awarding of additional points, can however, still occur.

If the customer is at his or her "home" store

then the assistant identifies the redemption offer or offers selected by the customer to the store computer 22 by keying in an identifying code, each redemption offer being defined a unique identifying code. The store controller 22, in which all of the information concerning the redemption offers is held, checks the balance of the card holder's points account, calculates the number of points required for the required redemption(s), and if the points balance is adequate, permits the selected redemption(s).

The terminal printer is then arranged to print out not only a list of the items purchased, but also details of the executed redemptions, together with the previous points total, the additional points awarded during the present transaction, the points redeemed during the present transaction and the new points total.

An example of a typical receipt is shown in Fig. 2, in which the printer 20 has printed quantity and price of each product purchased. In the example shown in Fig. 2, the printer also confirms that the customer has also selected a refund 30 on the purchase price of £2.89 of "Quality Street" (trademark) sweets in exchange for 200 points and a refund 32 of the purchase price of £1.59 on a creme bath product in exchange for 100 points. The total payable 34 is thus

adjusted in accordance with refunds selected by the customer and appears on the till receipt.

Beneath the total is printed the customer's identification number 36, the customer's previous points total 38, the points added during the present transaction 40, the points redeemed during the present transaction 42 and the new points total 44.

Another example is illustrated in Fig. 3, in which, in exchange for 1500 points 46, the customer has selected a money-off voucher and in exchange for 500 points 48 has requested a reduction of £5 on the total bill.

The total is thus adjusted by the £5 redeemed. In addition, it will be noted that the printer 20 is arranged to print a voucher 50 for the money-off offer selected in exchange for the 1500 points.

If a participating customer is not in his or her "home" store then, as mentioned above, redemption of points cannot be made.

Moreover, details of the total points credited to the customer are only held at the "home" store. Thus, a typical checkout receipt for a customer purchasing goods at a store other than the "home" store might be as illustrated in Fig. 5. It will be noted that no redemption has been made since the system does not permit it. The customer's scheme number 52 has been

printed on the till receipt, and also the number of points 54 earned during the present visit is printed. The printer 20 does not print the previous points total nor the new points total, since this information is only available at the "home" store. However, the customer's identification number 52 and the number of points awarded 54 are subsequently transmitted from the store computer 22 to the main computer 24 and thence to the store computer of the "home" store, whereupon the customer's points balance will be updated.

Fig. 5 is a schematic flow diagram of the checkout method in accordance with the present invention.

At step 110, the assistant ascertains whether the customer has a card. If not, then the purchases are checked out in the normal way at step 122. If a customer card is available the card is swiped at step 112 and at step 114 if the information of the card can be read an identification flag is set at step 116. If the information from the card cannot be read then the assistant is alerted by means of a message on the display 14 and the procedure moves to step 122 where the products are checked out in the normal way.

At step 118 the system ascertains from the information on the card whether the store is the

customer's "home" store. If it is the customer's "home" store a home store flag is set at step 120. In either case, the purchases are checked out in the normal way at step 122.

At step 124, if the identification flag was not set at step 116 then in addition to the item list which is printed as the products are checked out the total cost is also printed on a receipt at step 124'. If the identification flag was set at step 116 it is determined at step 126 whether any points redemption is required by the customer. If no points redemption is required then the procedure skips to step 136, as will be explained. If points redemption is required, it is ascertained at step 128 whether the home store flag was set at step 118. If the "home" store flag was not set then the procedure skips to step 136, as will be explained later, after alerting the assistant at step 129 that redemption is not possible. If the home store flag is set the customer advises the assistant of his or her choice of redemption(s) and the assistant inputs the code(s) for the selected redemption(s). At step 132 the store computer 22 checks whether the customer already has an accumulated points total which is sufficient to set against the requested redemption(s). If not, the procedure reverts to step 130 where alternative selections may

be made by the customer and the appropriate codes input.

If at step 132 sufficient points are available for the requested redemption(s), the redeemed points are subtracted from the customer balance at step 134 and the new total is stored in the "home" store computer 22.

At step 136, the computer 22 calculates the points to be awarded for the present transaction, for example on the basis of one point per £1 spent. At step 138, it is determined whether the "home" store flag was set at step 118. If the home store flag was set then at step 140 the store computer 22 updates the customer's point balance to take account of the points awarded during the present visit. At step 142, the printer 20, in addition to the item list already printed, prints the total cost to be paid by the customer, together with details of the points awarded during this transaction, details of any redemption, details of the previous points balance and details of the new points balance. As mentioned previously, the printer may also print vouchers or coupons to be used by the customer, in exchange for the predetermined number of points.

If at step 138 it is determined that the "home" store flag was not set, then in addition to the item

list the printer 20 prints the total cost and the details of the number of points awarded during the present visit.

The customer's identification number and the number of points awarded is stored in the store computer 22 and is subsequently sent to the main computer 24 which subsequently updates the customer's points record at the "home" store.

The invention is not restricted to the details of the foregoing embodiment.

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CLAIMS

1. A store checkout system comprising:
a plurality of terminals at customer checkout locations, for checking out products selected by a customer;

identification means for reading stored information from an identification token presented by a customer;

means for verifying the validity of the token and for establishing the identity of the card holder;

discrimination means for awarding credits to the card holder of a validated token on the basis of the purchase;

storage means for defining a plurality of predetermined credit redemption offers, each credit redemption offer corresponding to a predetermined number of customer credits;

input means for selecting one or more credit redemption offers chosen by the validated card holder;

means for checking whether the credit redemption selected by the card holder from the plurality of predefined credit redemption offers is permitted;

printing means for printing a record of any credits awarded and details of the or each executed credit redemption offer chosen by the validated card holder; and

means for updating the balance of credits held by the validated card holder on the basis of credits awarded and credits redeemed.

2. A store checkout system as claimed in claim 1, wherein one of the credit redemption offers comprises a predetermined discount on the total bill in exchange for a specified number of credits redeemed.

3. A store checkout system as claimed in claim 1 or claim 2, wherein one of the credit redemption offers comprises a refund of the price of one of a plurality of predefined products purchased by the customer in exchange for a predetermined number of credits redeemed.

4. A store checkout system as claimed in any of claims 1 to 3, wherein one of the credit redemption offers comprises vouchers for in-store goods or services or for goods or services offered by an external supplier in exchange for a predetermined number of credits redeemed.

5. A store checkout system as claimed in claim 4, wherein the printing means is arranged to print the vouchers.

6. A store checkout system as claimed in any of claims 1 to 5, wherein one of the credit redemption offers comprises discount coupons for future use in

the store or for goods or services offered by an external supplier.

7. A store checkout system as claimed in claim 6, wherein the printing means is adapted to print the coupons.

8. A store checkout system as claimed in any of claims 1 to 7, wherein the identification token comprises a machine-readable card and wherein each terminal is provided with a card reader.

9. A store checkout system as claimed in claim 8, wherein the machine-readable card comprises a magnetic strip upon which the customer's identification details are stored.

10. A store checkout system as claimed in any of claims 1 to 9, wherein each terminal comprises a bar code scanner.

11. A store checkout system as claimed in any of claims 1 to 10, wherein redemption of customer credits is only permitted at one or more specified stores.

12. A store checkout system as claimed in any of claims 1 to 11, wherein details of the credits awarded to each customer are held at a specified store associated with that customer.

13. A store checkout method comprising:
verifying a customer as a valid participant in a reward scheme;

awarding credits to the customer on the basis of a purchase made by the customer;

storing a plurality of predefined credit redemption offers, each credit redemption offer corresponding to a predetermined number of customer credits;

selection by the customer of one or more credit redemption offers;

checking whether the credit redemption offer selected from the plurality of credit redemption offers is permitted;

printing a record of any credits awarded and the details of the or each executed credit redemption offer chosen by the validated customer; and

updating the balance of credits held by the validated customer on the basis of credits awarded and the or each credit redemption offer executed.

14. A store checkout method as claimed in claim 13, wherein one of the credit redemption offers comprises a predetermined discount on the total bill in exchange for a specified number of credits.

15. A store checkout method as claimed in claim 13 or claim 14, wherein one of the credit redemption offers comprises a refund of the price of one of a plurality of predefined products purchased by the customer in exchange for a predetermined number of

credits redeemed.

16. A store checkout method as claimed in any of claims 13 to 15, wherein one of the credit redemption offers comprises vouchers for in-store goods or services or for goods and services offered by an external supplier.

17. A store checkout method as claimed in claim 16, wherein the voucher is printed when the redemption offer is selected by the validated customer.

18. A store checkout method as claimed in any of claims 13 to 17, wherein one of the credit redemption offers comprises discount coupons for future use in the store or for goods or services offered by an external supplier.

19. A store checkout method as claimed in claim 18, wherein the vouchers are printed when the credit redemption offer is selected by a validated customer.

20. A store checkout method as claimed in any of claims 13 to 19, wherein a customer is identified by reading information held on a machine-readable card.

21. A store checkout method as claimed in claim 20, wherein information concerning the identity of a customer is stored in a magnetic strip on the machine-readable card.

22. A store checkout method as claimed in any of claims 13 to 21, wherein credit redemption is only

permitted at a specified store.

23. A store checkout system substantially as herein described, with reference to, and as illustrated, in the accompanying drawings.

24. A store checkout method substantially as herein described, with reference to, and as illustrated, in the accompanying drawings.



Application No: GB 9521619.8
Claims searched: All

Examiner: Mr. G. Nicholls
Date of search: 9 October 1996

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): G4T (TBA TBX)

Int Cl (Ed.6): G07G 1/00 1/12 1/14

Other: ONLINE:WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2274349 A (HTEC LTD) Whole document. See especially pages 7, 11 and 13.	1, 2, 4 to 10, 13, 14, 16 to 21
X	WO 95/21428 A1 (CARD ONE DEVELOPMENT) Whole document	1, 8, 13, 20

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